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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,870	02/12/2004	Dennis Steven DeLorme	ROC920040005US1	6113

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IBM CORPORATION
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EXAMINER

KIM, PAUL

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,870

Applicant(s)

DELORME ET AL.

Examiner

Paul Kim

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 8-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 16-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/12/04, 9/12/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office action is responsive to the following communication: Amendment filed on 12 September 2006.
2. Claims 1-7, 16-21 and 22-27 are pending and present for examination. Claims 8-15 have been withdrawn.

Information Disclosure Statement

3. The information disclosure statements (IDS) submitted on 12 February 2004 and 12 September 2006 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
5. **Claims 16-20** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 16-20 recite "[a] data structure maintained by an operating system" which is software, per se, and therefore is non-statutory subject matter since it is not tangibly embodied so as to be executable.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. **Claims 1-7, 16-20, 21 and 22-27** are rejected under 35 U.S.C. 102(b) as being anticipated by Fletcher et al (U.S. Patent No. 7,047,257, hereinafter referred to as FLETCHER), filed on 3 April 2001, published on 3 October 2002, and issued on 16 May 2006.

8. **As per independent claims 1, 16, 21 and 22**, FLETCHER teaches:

A method for maintaining a data structure corresponding to an object having a first link from a first directory and a second link from a second directory in a filesystem, the method comprising the steps of:

storing a first anchor point that references the first directory, said first directory being of a first filesystem implementation {See FLETCHER, C6:L57-67, wherein this reads over "the custom file system presents two directories which represent the two software applications that the system hypothetically wishes to access (convert_2.2 and draw_1.4)" and "subdirectory 'draw' being linked to /main/drawing/draw_1.4/x86bin"}; and

storing a second anchor point that references the second directory, said second directory being of a second filesystem implementation different than the first {See FLETCHER, C6:L57-67, wherein this reads over "the custom file system presents two directories which represent the two software applications that the system hypothetically wishes to access (convert_2.2 and draw_1.4)" and "subdirectory 'convert' being linked to /main/drawing/convert_2.2/x86bin"}.

9. **As per dependent claims 2, 17 and 23**, FLETCHER teaches:

The method of claim 1, wherein the object is a file {See FLETCHER, C6:L22-30, wherein this reads over "[a] symbolic link is a special file that has a pathname as its data" and "Symbolic links are a flexible means of pathname indirection and are often used to provide multiple paths to a single file. Unlike hard links, symbolic links can cross file systems and can also create links to directories"}.

10. **As per dependent claims 3, 18 and 24**, FLETCHER teaches:

The method of claim 1, wherein the object is a directory {See FLETCHER, Figure 5; and C6:L56-67, wherein this reads over "these two sub-directories will be linked to their respective locations in the original directory"}.

11. **As per dependent claims 4, 19 and 25**, FLETCHER teaches:

The method of claim 3, wherein the directory is of the first filesystem implementation {See FLETCHER, C6:L57-67, wherein this reads over "the custom file system presents two directories which represent the two software applications that the system hypothetically wishes to access (convert_2.2 and draw_1.4)" and "subdirectory 'draw' being linked to /main/drawing/draw_1.4/x86bin"}.

12. **As per dependent claims 5, 20 and 26**, FLETCHER teaches:

The method of claim 4, wherein the first link from the first directory to the object is a directory link {See FLETCHER, C6:L57-67, wherein this reads over "the custom file system presents two directories which represent the two software applications that the system hypothetically wishes to access (convert_2.2 and draw_1.4)" and "subdirectory 'draw' being linked to /main/drawing/draw_1.4/x86bin"}; and

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the second link from the second directory to the object is a file link {See FLETCHER, C6:L22-30, wherein this reads over "[a] symbolic link is a special file that has a pathname as its data" and "Symbolic links are a flexible means of pathname indirection and are often used to provide multiple paths to a single file. Unlike hard links, symbolic links can cross file systems and can also create links to directories"}.

13. **As per dependent claim 6, FLETCHER teaches:**

The method of claim 1, further comprising the steps of:

receiving a request for information about the first link {See FLETCHER, C3:L57-67, wherein this reads over "a process manager will attempt to address requests"}; and

in response to the request, using the first anchor point when retrieving the information {See FLETCHER, C3:L57-67, wherein this reads over "a process manager will attempt to address requests on said custom filesystem prior to placing said requests on said main filesystem"; and C4:L15-21, wherein this reads over "responding to receipt of a request to perform an operation by: accessing said system configuration file; re-directing said requested operation to a corresponding real file location"}.

14. **As per dependent claims 7 and 27, FLETCHER teaches:**

The method of claim 1, further comprising the steps of:

receiving a request for information about the object {See FLETCHER, C3:L57-67, wherein this reads over "a process manager will attempt to address requests"};

selecting the first anchor point instead of the second anchor point to respond to the request {See FLETCHER, C3:L57-67, wherein this reads over "a process manager will attempt to address requests on said custom filesystem prior to placing said requests on said main filesystem"; and C4:L15-21, wherein this reads over "responding to receipt of a request to perform an operation by: accessing said system configuration file; re-directing said requested operation to a corresponding real file location"}.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is (571) 272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chase can be reached on (571) 272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Kim
Patent Examiner, Art Unit 2161
TECH Center 2100


SAM RIMELL
PRIMARY EXAMINER